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Guan et al.

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(54) **CORNER LAYOUT FOR HIGH VOLTAGE SEMICONDUCTOR DEVICES**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

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(58) **Field of Classification Search**
CPC H01L 29/407; H01L 29/66666; H01L 29/7811

See application file for complete search history.

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(57) **ABSTRACT**

A corner layout for a semiconductor device that maximizes the breakdown voltage is disclosed. The device includes first and second subsets of the striped cell arrays. The ends of each striped cell in the first array is spaced a uniform distance from the nearest termination device structure. In the second subset, the ends of striped cells proximate a corner of the active cell region are configured to maximize breakdown voltage by spacing the ends of each striped cell a non-uniform distance from the nearest termination device structure. It is emphasized that this abstract is provided to comply with the rules requiring an abstract that will allow a searcher or other reader to quickly ascertain the subject matter of the technical disclosure. It is submitted with the understanding that it will not be used to interpret or limit the scope or meaning of the claims.

8 Claims, 5 Drawing Sheets

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